Mr. Blair Wieland R. M. Wieland Co. P.O. Box 1000 Grabill, IN 46741

Re: **SPM 003-11242-00169** 

First Significant Permit Modification to

Part 70 No.: T 003-7733-00169

Dear Mr. Wieland:

R. M. Wieland Co. was issued a permit on February 19, 1999 for wood furniture manufacturing source. A letter requesting changes to this permit was received on March 22, 1999. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition of one (1) spray booth and the following insignificant activities: two (2) drying ovens, one (1) air dry cabinet, five (5) downdraft sanding tables and five (5) HVLP spray applicators. The changes are as follows with deletions appearing as strikeouts and new language in **bold**:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) sealer coat spray booth, identified as E12, with a maximum capacity of 445.21 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S1.
- (b) One (1) top coat spray booth, identified as E13, with a maximum capacity of 445.21 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S2.
- (c) One (1) finish coat spray booth, identified as E14, with a maximum capacity of 222.6 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S3.
- (d) Six (6) adhesive spray guns, two (2) high volume-low pressure (HVLP), identified as E1 and E2, and four (4) air atomized, identified as E11, E15, E16, and E17, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V8.
- (e) Four (4) adhesive spray guns, air atomized, identified as E3, E4, E5, and E6, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V6.
- (f) Five (5) adhesive spray guns, air atomized, identified as E7, E8, E9, E10 and E29, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V7.
- (g) One (1) sawmill including various woodworking equipment with particulate matter controlled by two (2) baghouses, BH1 and BH3, exhausting through vents S14 and S15 into the

building; one (1) spray booth type enclosure with a dry filter array, exhausting through vent S17 into the building; and one (1) cyclone, CY1, exhausting through vent S16 into the building.

- (h) One (1) finish coat spray booth, identified as E30, to be constructed within eighteen (18) months, with a maximum capacity of 222.6 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S3.
- (i) One (1) spray booth, known as E31, equipped with HVLP spray applicators and dry filters for overspray control, exhausted through Stack S14, capacity: 180 square feet of wood furniture per hour.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only. Pb 0.6 ton per year or 3.29 pounds per day,  $SO_2$  5 pounds per hour or 25 pounds per day,  $NO_x$  5 pounds per hour or 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, PM 5 pounds per hour or 25 pounds per day.

- (a) Woodworking processes in the furniture manufacturing plant, primarily for design purposes. (326 IAC 6-3).
- (b) Five (5) downdraft sanding tables, known as E35 E39, equipped with dual dry filters for particulate matter control, exhausted through Stacks S15 S19, capacity: 180 square feet of wood furniture per hour. (326 IAC 6-3)

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) sealer coat spray booth, identified as E12, with a maximum capacity of 445.21 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S1.
- (b) One (1) top coat spray booth, identified as E13, with a maximum capacity of 445.21 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S2.
- (c) One (1) finish coat spray booth, identified as E14, with a maximum capacity of 222.6 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S3.
- (d) Six (6) adhesive spray guns, two (2) high volume-low pressure (HVLP), identified as E1 and E2, and four (4) air atomized, identified as E11, E15, E16, and E17, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V8.
- (e) Four (4) adhesive spray guns, air atomized, identified as E3, E4, E5, and E6, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V6.
- (f) Five (5) adhesive spray guns, air atomized, identified as E7, E8, E9, E10 and E29, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V7.

(i) One (1) spray booth, known as E31, equipped with HVLP spray applicators and dry filters for overspray control, exhausted through Stack S14, capacity: 180 square feet of wood furniture per hour.

#### D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from each of the coating spray booths, E12, E13, and E14 and E31 shall each not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet coating), the surface coatings applied to wood furniture and/or wood components in spray booth, E31, shall utilize one or more of the following application methods:

Airless Spray Application Electrostatic Spray Application Heated Airless Spray Application Brush or Wipe Application High-Volume Low-Pressure HVLP Air-Assisted Airless Spray Application Electrostatic Bell or Disc Application Roller Coating Dip-and-Drain Application Aerosol Spray Cans

High-volume low-pressure spray is an acceptable alternative application of air-assisted airless spray. High-volume low-pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.56 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility these facilities and any control devices.

#### **Compliance Determination Requirements**

#### D.1.67 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63]

- (a) Pursuant to 40 CFR 63, Subpart JJ, if the Permittee elects to demonstrate compliance using 63.804(a)(3) or 63.804(c)(2) or 63.804(d)(3) or 63.804(e)(2), performance testing must be conducted in accordance with 40 CFR 63, Subpart JJ and 326 IAC 3-6.
- (b) The Permittee is not required to test these facilities by this permit. IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

#### D.1.78 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.89 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when coating spray booth E12, E13, or E14 or E31 is in operation.

#### D.1.910 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emissions, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.1.<del>10</del>**11** Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.2.
  - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
  - (2) The HAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
  - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable coating used.
  - (4) The VHAP content in weight percent of each thinner used.

- (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (c) To document compliance with Conditions D.1.89 and D.1.910, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.1+2 Reporting Requirements

- (a) An Initial Compliance Report to document compliance with Condition D.1.2 and the Certification form, shall be submitted within sixty (60) days following the compliance date of December 7, 1998. The Initial Compliance Report must include data from the entire month that the compliance date falls.
- (b) A semi-annual Continuous Compliance Report to document compliance with Condition D.1.2 and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
- (2) July 1 through December 31.
- (c) The reports required in (a), and (b) of this condition shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

#### SECTION D.4

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) Woodworking processes in the furniture manufacturing plant, primarily for design purposes. (326 IAC 6-3).
- (b) Five (5) downdraft sanding tables, known as E35 E39, equipped with dual dry filters for particulate matter control, exhausted through Stacks S15 S19, capacity: 180 square feet of wood furniture per hour. (326 IAC 6-3)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from woodworking processing and shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ 

where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

**Compliance Determination Requirement** 

#### D.4.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Mark L. Kramer, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 516-691-3395 or in Indiana at 1-800-451-6027 (ext 516-691-3395).

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

Attachments MLK/MES

cc: File - Allen County

U.S. EPA, Region V

Allen County Health Department

Air Compliance Section Inspector - Jennifer Schick

Compliance Data Section - Karen Nowak

Administrative and Development - Janet Mobley Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

R. M. Wieland Co. 13737 Main Street and 13802 Sawmill Road Grabill, Indiana 46741

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T003-7733-00169		
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 19, 1999	
First Minor Source Modification 003-11777	Pages Affected: 6, 29 - 33 Section Added D.4 on Page 41a	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: August 13, 1999	
First Significant Permit Modification 003-11242-00169	Pages Affected: 6, 29 - 33 Section Added D.4 on Page 41a	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:	

#### First Significant Permit Modification 003-11242-00169 Amended by: MES

Page 2 of 46 Part 70 T 003-7733-00169

#### TABLE OF CONTENTS

Α	SOUR	RCE SUMMARY	5
	A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	5
	A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]	5
	A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] .	
	A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
	Λ. <del>Τ</del>	Tall 70 Termit Applicability [320 IAO 2-7-2]	U
В	CENE	RAL CONDITIONS	7
D	B.1	Permit No Defense [326 IAC 2-1-10] [IC 13]	7
	B.1 B.2		
		Definitions [326 IAC 2-7-1]	
	B.3	Permit Term [326 IAC 2-7-5(2)]	
	B.4	Enforceability [326 IAC 2-7-7(a)]	
	B.5	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
	B.6	Severability [326 IAC 2-7-5(5)]	7
	B.7	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	_
	B.8	Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]	
	B.9	Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]	
	B.10	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]	
	B.11	Annual Compliance Certification [326 IAC 2-7-6(5)]	
	B.12	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)]	9
	B.13	Emergency Provisions [326 IAC 2-7-16]	
	B.14	Permit Shield [326 IAC 2-7-15]	
	B.15	Multiple Exceedances [326 IAC 2-7-5(1)(E)]	
	B.16	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
	B.17	Permit Modification, Reopening, Revocation and Reissuance, or Termination	13
	B.18	Permit Renewal [326 IAC 2-7-4]	14
	B.19	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
	B.20	Permit Revision Under Economic Incentives and Other Programs	15
	B.21	Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]	15
	B.22	Operational Flexibility [326 IAC 2-7-20]	15
	B.23	Construction Permit Requirement [326 IAC 2]	
	B.24	Inspection and Entry [326 IAC 2-7-6(2)]	
	B.25	Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]	
	B.26	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]	
	B.27	Enhanced New Source Review [326 IAC 2]	
С	SOUR	RCE OPERATION CONDITIONS	19
	Emiss	sion Limitations and Standards [326 IAC 2-7-5(1)]	
	C.1	PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]	19
	C.2	Particulate Matter Emission Limitations For Processes with Process Weight Rates	
	V	Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]	19
	C.3	Opacity [326 IAC 5-1]	
	C.4	Open Burning [326 IAC 4-1] [IC 13-17-9]	
	C.5	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
	C.6	Fugitive Dust Emissions [326 IAC 6-4]	
	C.7	Operation of Equipment [326 IAC 2-7-6(6)]	
	C.7	Stack Height [326 IAC 1-7]	
	C.8 C.9	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]	
	0.9	ASDESTOS ADATEMENT FIOJECTS [020 IAO 14-10] [020 IAO 10] [40 OFN 01.140]	20
	Tostir	ng Requirements [326 IAC 2-7-6(1)]	
	C.10	Performance Testing [326 IAC 3-6]	21
	0.10	i enormance resumg [520 iAC 5-0]	۱ ک

#### First Significant Permit Modification 003-11242-00169 Amended by: MES

Page 3 of 46 Part 70 T 003-7733-00169

		liance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]	
	C.11	Compliance Schedule [326 IAC 2-7-6(3)]	21
	C.12	Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]	21
	C.13	Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]	
	C.14	Monitoring Methods [326 IAC 3]	
	C.15	Pressure Gauge Specifications	
	Corre	ctive Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]	
	C.16	Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]	22
	C.17	Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]	
	C.17	Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5]	
	C.10	Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]	
		d Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]	
	C.20	Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]	
	C.21	Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]	26
	C.22	General Record Keeping Requirements [326 IAC 2-7-5(3)]	
	C.23	General Reporting Requirements [326 IAC 2-7-5(3)(C)]	27
	Strato	espheric Ozone Protection	
	C.24	Compliance with 40 CFR 82 and 326 IAC 22-1	28
D.1	FACIL	ITY OPERATION CONDITIONS - Spray Booths & Adhesive Spray Stations	29
	Fmiss	sion Limitations and Standards [326 IAC 2-7-5(1)]	
	D.1.1	Volatile Organic Compounds (VOC) [326 IAC 8]	29
	D.1.2	Wood Furniture NESHAP [40 CFR 63, Subpart JJ]	
	D.1.3	Work Practice Standards [40 CFR 63.803]	
	D.1.4	Particulate Matter (PM) [326 IAC 6-3-2(c)]	
	D.1.5	Volatile Organic Compounds (VOC [326 IAC 8-2-12]	
	D.1.6	Preventive Maintenance Plan [326 IAC 2-7-5(13)]	
	Comp	liance Determination Requirements	
	•	Iliance Determination Requirements Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63]	24
	D.1.7		
	D.1.6	Volatile Organic Compounds (VOC)	31
		liance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]	
		Particulate Matter (PM)	
	D.1.10	Monitoring	31
	Recor	d Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]	
	D.1.11	Record Keeping Requirements	32
	D.1.12	Reporting Requirements	32
D.2	FACIL	ITY OPERATION CONDITIONS - Sawmill	34
	Emiss	sion Limitations and Standards [326 IAC 2-7-5(1)]	
	D.2.1	Particulate Matter (PM) [326 IAC 6-3-2(c)]	34
	D.2.2	Preventive Maintenance Plan [326 IAC 2-7-5(13)]	
	Comp	liance Determination Requirements	
	D.2.3	•	34
	_	Particulate Matter (PM)	

#### First Significant Permit Modification 003-11242-00169 Amended by: MES

Page 4 of 46 Part 70 T 003-7733-00169

	Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]  D.2.5 Visible Emissions Notations  D.2.6 Parametric Monitoring  D.2.7 Broken Bag or Failure Detection  D.2.8 Dry Filter Array and Cyclone Inspections	35 35
	Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] D.2.9 Record Keeping Requirements	36
D.3	FACILITY OPERATION CONDITIONS - New Spray Booth	37
	General Construction Conditions  Effective Date of the Permit  First Time Operation Permit  Emission Limitations and Standards [326 IAC 2-7-5(1)]  D.3.6 Volatile Organic Compounds (VOC) [326 IAC 8]  D.3.7 Wood Furniture NESHAP [40 CFR 63, Subpart JJ]  D.3.8 Work Practice Standards [40 CFR 63.803]  D.3.9 Particulate Matter (PM) [326 IAC 6-3-2(c)]  D.3.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]	37 37 38 38 39 39
	Compliance Determination Requirements  D.3.11 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63]  D.3.12 Volatile Organic Compounds (VOC)	
	Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]  D.3.13 Particulate Matter (PM)  D.3.14 Monitoring	
	Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]  D.3.15 Record Keeping Requirements  D.3.16 Reporting Requirements	
D.4	FACILITY OPERATION CONDITIONS - Insignificant Activities	1a
	Emission Limitations and Standards [326 IAC 2-7-5(1)] D.4.1 Particulate Matter (PM) [326 IAC 6-3]	1a
	Compliance Determination Requirements  D.4.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11] 4	1a
Emerge Semi-A	cation ency/Deviation Occurrence Report Annual Report: VOC and VHAP Usage - Wood Furniture NESHAP Annual Compliance Monitoring Report	45

#### First Significant Permit Modification 003-11242-00169 Amended by: MES

Page 6 of 46 Part 70 T 003-7733-00169

filters for particulate control, and exhausting to stack S3.

(i) One (1) spray booth, known as E31, equipped with HVLP spray applicators and dry filters for overspray control, exhausted through Stack S14, capacity: 180 square feet of wood furniture per hour.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only. Pb 0.6 ton per year or 3.29 pounds per day, SO2 5 pounds per hour or 25 pounds per day. NOx 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day.

- (a) Woodworking processes in the furniture manufacturing plant, primarily for design purposes. (326 IAC 6-3).
- (b) Five (5) downdraft sanding tables, known as E35 E39, equipped with dual dry filters for particulate matter control, exhausted through Stacks S15 S19, capacity: 180 square feet of wood furniture per hour. (326 IAC 6-3)

#### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

#### First Significant Permit Modification 003-11242-00169 Amended by: MES

Page 29 of 46 Part 70 T 003-7733-00169

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) sealer coat spray booth, identified as E12, with a maximum capacity of 445.21 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S1.
- (b) One (1) top coat spray booth, identified as E13, with a maximum capacity of 445.21 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S2.
- (c) One (1) finish coat spray booth, identified as E14, with a maximum capacity of 222.6 pounds of wood pieces per hour, using dry filters for particulate control, and exhausting to stack S3.
- (d) Six (6) adhesive spray guns, two (2) high volume-low pressure (HVLP), identified as E1 and E2, and four (4) air atomized, identified as E11, E15, E16, and E17, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V8.
- (e) Four (4) adhesive spray guns, air atomized, identified as E3, E4, E5, and E6, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V6.
- (f) Five (5) adhesive spray guns, air atomized, identified as E7, E8, E9, E10 and E29, each with a maximum capacity of 400 square feet of foam glued per hour, exhausting to vent V7.
- (i) One (1) spray booth, known as E31, equipped with HVLP spray applicators and dry filters for overspray control, exhausted through Stack S14, capacity: 180 square feet of wood furniture per hour.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8]

Any change or modification which may increase potential emissions from the surface coating operation, shall require prior approval from the OAM to determine applicability requirements of 326 IAC 8, before such change may occur.

#### D.1.2 Wood Furniture NESHAP [40 CFR 63, Subpart JJ]

- (a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ), with a compliance date of December 7, 1998.
- (b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
  - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
    - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids, as applied; or
    - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or

First Significant Permit Modification 003-11242-00169 Amended by: MES

Page 30 of 46 Part 70 T 003-7733-00169

- (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
- (D) Use any combination of (A), (B), and (C).
- (2) Limit VHAP emissions from contact adhesives as follows:
  - (A) Use compliant contact adhesives as follows:
    - (i) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 pound VHAP per pound solids;
    - (ii) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids;

or

- (B) Use a control device to limit emissions to one (1.0) for existing pound VHAP per pound solids.
- (3)The strippable spray booth material shall have a maximum VOC content of eighttenths (0.8) pounds VOC per pound solids.

#### D.1.3 Work Practice Standards [40 CFR 63.803]

The owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within sixty (60) calendar days after the compliance date. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803:

- Operator training course. (a)
- (b) Leak inspection and maintenance plan.
- (c) Cleaning and washoff solvent accounting system.
- (d) Chemical composition of cleaning and washoff solvents.
- (e) Spray booth cleaning.
- Storage requirements. (f)
- Conventional air spray guns shall only be used under the circumstances defined under 40 (g) CFR 63.803(h).
- (h) Line cleaning.
- Gun cleaning. (i)
- Washoff operations. (j)
- (k) Formulation assessment plan for finishing operations.

#### Particulate Matter (PM) [326 IAC 6-3-2(c)] D.1.4

The PM from each of the coating spray booths, E12, E13, E14 and E31, shall each not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

 $E = 4.10 P^{0.67}$ 

First Significant Permit Modification 003-11242-00169 Amended by: MES Page 31 of 46 Part 70 T 003-7733-00169

#### D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet coating), the surface coatings applied to wood furniture and/or wood components in spray booth, E31, shall utilize one or more of the following application methods:

Airless Spray Application Electrostatic Spray Application Heated Airless Spray Application Brush or Wipe Application Air-Assisted Airless Spray Application Electrostatic Bell or Disc Application Roller Coating

Dip-and-Drain Application

High-Volume Low-Pressure HVLP Aerosol Spray Cans

High-volume low-pressure spray is an acceptable alternative application of air-assisted airless spray. High-volume low-pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

#### **Compliance Determination Requirements**

#### D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63]

- (a) Pursuant to 40 CFR 63, Subpart JJ, if the Permittee elects to demonstrate compliance using 63.804(a)(3) or 63.804(c)(2) or 63.804(d)(3) or 63.804(e)(2), performance testing must be conducted in accordance with 40 CFR 63, Subpart JJ and 326 IAC 3-6.
- (b) The Permittee is not required to test these facilities by this permit. IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C Performance Testing.

#### D.1.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.9 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when coating spray booth E12, E13, E14 or E31 is in operation.

#### D.1.10 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the

First Significant Permit Modification 003-11242-00169 Amended by: MES Page 33 of 46 Part 70 T 003-7733-00169

presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emissions, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.2.
  - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
  - (2) The HAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
  - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable coating used.
  - (4) The VHAP content in weight percent of each thinner used.
  - (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (c) To document compliance with Conditions D.1.9 and D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.12 Reporting Requirements

- (a) An Initial Compliance Report to document compliance with Condition D.1.2 and the Certification form, shall be submitted within sixty (60) days following the compliance date of December 7, 1998. The Initial Compliance Report must include data from the entire month that the compliance date falls.
- (b) A semi-annual Continuous Compliance Report to document compliance with Condition D.1.2 and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

#### First Significant Permit Modification 003-11242-00169 Amended by: MES

Page 33 of 46 Part 70 T 003-7733-00169

- (1) January 1 through June 30.
- (2) July 1 through December 31.
- (c) The reports required in (a), and (b) of this condition shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

#### First Significant Permit Modification 003-11242-00169 Amended by: MES

Page 41a of 46 Part 70 T 003-7733-00169

#### SECTION D.4

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) Woodworking processes in the furniture manufacturing plant, primarily for design purposes. (326 IAC 6-3).
- (b) Five (5) downdraft sanding tables, known as E35 E39, equipped with dual dry filters for particulate matter control, exhausted through Stacks S15 S19, capacity: 180 square feet of wood furniture per hour. (326 IAC 6-3)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from woodworking processing and shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### **Compliance Determination Requirement**

#### D.4.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit

#### **Source Background and Description**

Source Name: R. M. Wieland Co.

Source Location: 13737 Main Street and 13802 Sawmill Road, Grabill, IN 46741

County: Allen SIC Code: 2511, 2521

Operation Permit No.: T 003-7733-00169
Operation Permit Issuance Date: February 19, 1999
Permit Modification No.: T 003-11242-00169
Permit Reviewer: Mark L. Kramer

The Office of Air Management (OAM) has reviewed a modification application from R. M. Wieland Co. relating to the operation of wood furniture manufacturing source.

#### **History**

On March 22, 1999, R. M. Wieland Co. submitted an application to the OAM requesting to add an additional surface coating booth and insignificant activities. R. M. Wieland Co. was issued a Part 70 permit on February 19, 1999. A minor source modification, T 003-10777-00169, was issued to this source on August 13, 1999.

#### **Permit Modification**

Pursuant to 326 IAC 2-7-12(d), this proposed significant permit modification to the Part 70 Operating Permit, T 003-7733-00169, issued on February 19, 1999, is required to incorporate the first minor source modification, T 003-10777-00169, into the Part 70 Operating Permit. This proposed permit modification is necessary since the the minor source modification is subject to the requirements of 40 CFR Part 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations). This permit modification will allow for the operation of the facilities covered in the minor source modification, T 003-10777-00169.

Although the minor source modification, T 003-10777, has already been through the required 45-day US EPA period for review, this proposed significant permit modification will be subject to a 30-day period for public comment.

#### Conclusion

The operation of this wood furniture manufacturing source shall be subject to the conditions of the attached proposed significant permit modification 003-11242-00169.